WHAT IS CLAIMED IS:

1. A method for controlling transmit signals, the method comprising:

calibrating an analog step attenuator by applying a digital attenuator to determine an accuracy in attenuation of the analog step attenuator; and

using the determined accuracy of the analog step attenuator to facilitate realization of a predetermined attenuation using both the analog step attenuator and the digital attenuator.

2. The method of claim 1 wherein the digital attenuator determines the actual sizes of the analog steps as the analog step attenuator is stepped through a range of attenuation levels.

3. The method of claim 1 further comprising:

applying the determined accuracy to maximize the use of the analog step attenuator to allow the digital attenuator to further increase attenuation granularity.

4. The method of claim 1 wherein the calibrating further comprises:

changing a level of a generated signal by a programmable value in the digital attenuator;

producing an analog signal in a digital to analog converter (DAC) that is a function of the digital input;

changing the level of the signal in the analog step attenuator by a predetermined amount;

determining a digital equivalent of the signal output from the DAC; and

comparing the level of the digital equivalent to the level of the generated signal, the comparison providing an actual change in attenuation caused by the analog step

attenuator, the actual change in attenuation indicative of the accuracy in attenuation of the analog step attenuator.

5. The method of 4 wherein calibrating further comprises minimizing spurious out-of-band signals generated by transmitter power changes.

6. The method of claim 1 wherein the calibrating is a chosen function of a calibration control block, the calibration control block providing signal selection and input signal to one or more multiplexers, at least one of the multiplexers a selection that passes a digital value created by the calibration control block to the digital attenuator.

7. The method of claim 6 wherein at least one multiplexer is coupled to enable a delay that functions to apply changes in attenuation realized in the digital attenuator and the analog step attenuator to the signal at the same point to avoid large transient changes at the output of the filter.in attenuation.

8. The method of claim 6 wherein the input signal from the calibration control block is coupled to a storage block configured to store results of calibration.

9. The method of claim 8 wherein the storage block is a look up table, the results of calibration being thresholds for operation of attenuation by both the analog step attenuator and the digital attenuator.

10. The method of claim 1 further comprising:

changing the digital attenuation until a resulting signal level is within a predetermined tolerance of a second signal level; and

storing the amount of change in the digital attenuator in a look up table.

11. The method of claim 1 wherein the transmit signals are part of a wideband wireless communication system.

12. A method for achieving a change in attenuation, the method comprising:

applying smaller increments of attenuation to a digital attenuator relative to known increments of attenuation capable in an analog step attenuator;

comparing a resulting change in attenuation to a predetermined attenuation threshold; and

changing attenuation of an analog step attenuator and the digital attenuator according to the predetermined attenuation threshold.

13. The method of claim 12 wherein the changing attenuation continues until a predetermined desired attenuation is reached.

14. The method of claim 12 wherein the change in attenuation is a requested change, a ramp control block receiving the change request and altering the request into a series of small steps that realizes the requested change.

15. The method of claim 14 wherein the requested change is accommodated by changing the digital attenuation until the change reaches a value that can be accommodated by the analog step attenuator, the analog step attenuator using step sizes determined during a calibration mode.

16. The method of claim 14 wherein the ramp control block is configured to be coupled to a storage block of predetermined step sizes.

17. The method of claim 16 wherein the storage block is a look up table, the predetermined step sizes being the series of small steps to avoid spectral distortion.

18. A digital signal processor comprising:

a signal generation unit coupled to an input multiplexer, the input multiplexer configured to receive a digital modulated signal;

a digital attenuator coupled to the input multiplexer, the digital attenuator configured to provide an attenuated signal to a digital-to-analog converter and an analog step attenuator outside the digital signal processor;

a closed loop calibration control block configured to receive a signal output from a baseband filter, the baseband filter configured to receive the analog signal output from the analog step attenuator;

a storage block configured to receive control signals from the closed loop calibration control block, the storage block providing a calibrated step size indicative of an accuracy in attenuation of the analog step attenuator; and

an open loop ramp up/down control block coupled to the storage block to apply the determined accuracy of the analog step attenuator to facilitate realization of a predetermined desired attenuation using both the analog step attenuator and the digital attenuator.

19. The digital signal processor of claim 18 wherein the storage block is a look up table.

20. The digital signal processor of claim 18 wherein the calibrated step size enables the analog step attenuator to address any additional attenuation required.

21. The digital signal processor of claim 18 wherein a digital signal controls an attenuation level realized in the analog step attenuator by controlling switches that select different configurations of resistors in a resistive dividing network.

22. An integrated circuit comprising:

a signal generation unit coupled to an input multiplexer, the input multiplexer configured to receive a digital modulated signal;

a digital attenuator coupled to the input multiplexer, the digital attenuator configured to provide an attenuated signal to a digital-to-analog converter and an analog step attenuator outside the digital signal processor;

a closed loop calibration control block configured to receive a signal output from a baseband filter, the baseband filter configured to receive the analog signal output from the analog step attenuator;

a storage block configured to receive control signals from the closed loop calibration control block, the storage block providing a calibrated step size indicative of an accuracy in attenuation of the analog step attenuator; and

an open loop ramp up/down control block coupled to the storage block to apply the determined accuracy of the analog step attenuator to facilitate realization of a predetermined desired attenuation using both the analog step attenuator and the digital attenuator.

23. A system for attenuating a signal, the system comprising:

a plurality of calibration components; and

a plurality of operating components including at least a digital attenuator and an analog step attenuator, the plurality of operating components coupled to the calibration components, the operating components including one or more of the calibration components, the operating components operable during a normal mode, the operating components configured to apply smaller increments of attenuation to the digital attenuator relative to known increments of attenuation capable in the analog step attenuator, one or more of the operating components configured to compare a resulting change in attenuation to a predetermined attenuation threshold determined by one or more of the calibration components, the operating components

configured to change attenuation of the analog step attenuator and the digital attenuator according to the predetermined attenuation threshold.